

concerned with sports and leisure safety. Its remit would be to promote safety in the pursuit of all sporting and leisure activity. Three tasks merit urgent attention. Firstly, all existing sources of data on sports and leisure injury need to be collated and disseminated. Secondly, formal linkages (healthy alliances) should be further developed between sports organisations (such as sports councils) and health agencies to improve communication, exchange information, pool expertise and experience, and promote joint preventive action. Thirdly, a programme of research designed to provide better understanding of the causes and possible prevention of these injuries should be constructed and implemented. The NHS has an

important role to play in all of these areas and is ideally placed to provide the leadership necessary to facilitate action.

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Health impact assessment

An idea whose time has come

The Health of the Nation, England's strategy for a healthy population, acknowledges explicitly that many government policies have an impact on health and that their consequences for health need to be assessed and, when appropriate, taken into account.¹ England is not alone: the idea of health impact assessment is almost universally popular, though its implementation is patchy. In the developing world, where the importance of healthy public policy is well understood, the prospective assessment of the health impact of resource allocation policies or of development projects is nothing new.^{2,3} In the developed world, however, acknowledgement of the need for health impact assessment is still in its early stages, and its meaning, methods, and application remain to be established. Only now is the scientific community coming to realise the crucial role of public and private policies and projects in influencing the public's health.

The Commission of the European Union has recently stated that article 129 of the European Union Treaty "requires the Commission to check that proposals for policies, and implementing measures and instruments, do not have an adverse impact on health, or create conditions which undermine the promotion of health."⁴ Such an acknowledgement is well overdue, given the European Union's current policies of funding the promotion of whole fat dairy produce and tobacco production.⁵

In the United Kingdom the need for health impact assessment as an integral feature of policy development and evaluation is no less pressing. There are many examples of adverse effects on health that a prospective assessment of the health impact of public policy could help avoid. These include the increased incidence of myocardial infarction that results from work environments which place high psychological demands on workers but allow them little scope for decision making and control of those demands⁶; the motor vehicle accidents associated with transport policies that put freedom of traffic flow above the safety needs of communities⁷; and the increased poverty and exposure to cold caused by the imposition of value added tax on fuel.⁸

In this context the recent publication of a British government booklet on policy appraisal and health⁹ is

welcome—as is its distribution to local authorities as well as to the health sector in England. But its exclusive focus on economic appraisal methods of health impact assessment puts at risk its otherwise laudable objectives.

Impact assessment for outcomes other than health has become established in the developed world in recent decades, most notably as a result of the United States' National Environmental Policy Act of 1969. This act was rapidly followed by the development and implementation of methods for environmental (and later for social) impact assessment,¹⁰ focusing chiefly on the identification, assessment, and management of risk.¹¹ Methods for assessing the impact of policy (as distinct from policy evaluation, which examines the extent to which a policy meets its stated objectives) are still in the formative stages.¹²⁻¹⁵

Emerging methods for health impact assessment are likely to draw heavily on the experience of practitioners in these closely related fields. The methods all emphasise the importance of focusing on equitable outcomes; explicitly targeting disadvantaged groups; enabling the full participation of those likely to be affected by the policy or project; and using qualitative as well as quantitative methods of inquiry. The economic contribution is but one important element within a multidisciplinary framework broad enough to encompass the wide range of impacts on health. The need for a broad framework, and not simply one that concentrates on economic methods and outcomes, was confirmed in the United Kingdom's sole example of a completed prospective health impact assessment, which assessed the potential health impact of an additional runway at Manchester Airport (K Ardern, personal communication). While the government's initiative represents a welcome foot in this particular door, much still remains to be done before evidence based policy making can become a reality.¹⁶

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Climate change: not a threat but a promise

Doing nothing is no longer an option

Global warming can no longer be dismissed as a catastrophe theory dreamt up by scaremongers. In the past few months two reports from internationally renowned organisations have offered grave warnings of the threat that climate change poses, within current lifetimes, to humans and ecosystems^{1,2}; and last week, in the face of frantic lobbying from the fossil fuel industry, 134 nations, including the United States, agreed to work towards "quantified legally binding" cuts in emissions of the main greenhouse gas, carbon dioxide. What is surprising is how little these concerns have impinged on the media and on our daily lives.

Earlier this month, the Intergovernmental Panel on Climate Change (IPCC) confirmed previous reports that human activity has had a "discernible influence" on the earth's climate, and painted a grim picture of the future if nothing was done.¹ At current rates of increase in the burning of fossil fuels, it will take only another 50-60 years for the levels of carbon dioxide in the atmosphere to reach double the levels present at the start of the industrial revolution. By 2100, the global average surface temperature is predicted to rise by about 2°C and sea level by about 50 cm.

While British newspapers envisioned champagne and sunshine on the British Riviera, a joint report from the World Health Organisation, the World Meteorological Organisation, and the United Nations Environment Programme portrayed more ghastly reality.² Health and life will be endangered by heat waves, storms, floods, droughts, worsening air pollution, and shifts in vector borne diseases, causing for example 50-80 million additional cases of malaria each year. The rise in sea level and reduced agricultural production will cause major social upheaval, especially in small island states and low lying areas, and famine, especially in lower income countries.

National responses to such gloomy predictions have varied, but for once Britain is taking a lead. It is one of the few industrialised countries to be meeting commitments made at the Earth Summit in Rio de Janeiro, to cut carbon dioxide emissions to 1990 levels by 2000. In a rousing speech at the United Nations climate change convention in Geneva last week, Britain's environment secretary, John Gummer, called for other countries to honour this agreement and to commit to further cuts—of 5-10% by 2010. "The alarm bells ought to be ringing in every capital throughout the world," he said. His seven point plan for action included removing subsidies on the use of fossil fuels, introducing competition into energy markets, increasing duty on road fuel, and taxing aviation fuel.

There are other signs of a vital shift in the British government's commitment to environmental reform. The environment is now a priority area for the government's strategy document, *Health of the Nation*, and the Department of Transport recently released its National Cycling Strategy, which aims to quadruple the number of trips made by bicycle by 2012.³

Several factors have helped to cut Britain's emissions: the shift from oil to gas and nuclear power; campaigns to encourage energy efficiency in homes and businesses; and an annual

increase in taxation on petrol and diesel of 5% on top of inflation. Such initiatives contrast starkly with America's recent decision to lift all taxes on petrol, and the refusal by Australia, New Zealand, and the petrol exporting countries to commit to legally binding reductions.

But while the British government's change in attitude is encouraging, environmentalists doubt the extent of its commitment. Despite the cycling report, there is no sign of an integrated transport policy, nor of a commitment to invest in alternative energy technology. On the contrary, the Department of Trade and Industry recently announced proposals to speed up oil exploration off the British coast.

Greenpeace supports the call from the Alliance of Small Island States for much more radical change. Stabilising emissions is not the same as stabilising concentrations of carbon dioxide in the atmosphere. These will continue to rise, though at a slower rate, even if emissions are stabilised at 10% below 1990 levels. To avoid the disaster predicted by the intergovernmental panel, actual concentrations of carbon dioxide will need to be stabilised at levels less than double those present at the beginning of the industrial revolution. This will require cuts of at least 20% by 2005. The intergovernmental panel says that such cuts are feasible. Up to 30% of energy could be saved within the next two to three decades at little or no cost, and savings of 50-60% could be achieved by implementing existing technologies.

The vulnerable small island states have other less obvious allies. The insurance industry has lobbied for action, spurred on by predictions that two major climate disasters, such as a hurricane in New York City, would wipe out the whole industry.

Conspicuous by its absence has been any sense of urgency in the British media. As the *Observer* newspaper pointed out⁴ the daily newspapers have been surprisingly muted in their coverage. "Those papers which greeted the conference by accepting its central thesis assumed they had done enough. Papers which cannot stomach the scientific evidence for global warming ignored it." Whatever the explanation, the public has been left uninformed about a serious issue. In the run up to the last general election, public concern about the environment took third place to concern about taxation and the health service. Climate change will affect us all and must now be a major priority in politics, the media, and medicine.

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